

TOXICITY PROGRAM REVIEW
STAKEHOLDER'S GROUP MEETING #7
March 27, 2002

PRESENT: Dan Kusnierz, Bill Zarolinski, Nick Bennett, Darold Wooley, Bill Taylor, John Barlow, Deirdre Whitehead, Fredrick Nicolar, Marvin Cling, Tim Andrews, Bill Ball, Steve Silva, David VanWie, Barry Mower, Stuart Rose, Gregg Wood, Dennis Merrill

1. DEP thanked all participants for their continuing effort and contribution to the stakeholder process. This is very much appreciated.
2. In a follow-up to the previous meeting, there was a discussion of methods for evaluation of WET test data. DEP has contacted several other states to inquire what statistical methods they use. Some use ICp and others use hypothesis. Where ICp is used, 25% is the most common end point. DEP recently received data from laboratories to allow comparison of statistical methods and the appropriate ICp value. The EPA WET test methods manuals allow the use of either ICp or hypothesis methods, so making a specific reference in the rule is not necessary.
3. Some suggested that the pending biocriteria rule be included in Chapter 530 - that rule is very closely related to the toxicity program. DEP would like to keep the two separate as the biocriteria rule has applicability beyond the scope of Chapter 530. There will be an effort made to coordinate the presentation of the rules to the Board in the same time frame.

Discussion of Chapter 530

4. There is a need to re-work some of the language to make it read clearer. There will be a need to rely on license applications to supplement the rule for the review of specific discharges. DEP pointed out that individual applications need case by case evaluation and judgement. There was some concern with what may be required for testing of lesser-known compounds that may have secondary health effects.
5. In section B.3, there was a question about the use of brook trout in WET testing. EPA noted that as an approved state, Maine has some latitude to use its own tests as long as there is demonstration that the test is effective in identifying toxicity. Also in this section, DEP will need to follow a process for review and publishing reporting limits for chemical tests. DEP mentioned that there will be a need to revise these values from time to time, similar to background concentrations and review of new organic pollutants. Prior to publishing values, the DEP should seek peer review and comment on proposals.
6. Regarding section B.4, there was a discussion of the best way to implement changes in testing requirements and other elements of the rule. There is a risk that major, rapid changes in the program will cause a lot of confusion. Also, there are some legal questions about how adoption of a new rule will mesh with current monitoring requirements in existing licenses. Many licenses have testing requirements, but no numeric effluent limits. When numeric limits are present, they are typically based on a past high effluent concentrations, and the test

schedules in the license may be different from a standard monitoring program. DEP has been consulting with the Attorney General's office on this topic. One possible option discussed in the meeting would be for a letter making minor modifications to test schedules to be sent for those facilities that do not have numeric limits to bring them in line with the requirements of a new rule. In any event, it will be very important for there to be good education and public relations to make the transition in monitoring requirements the least confusing as possible.

7. Currently, there is concern that the new requirements of the proposed Chapter 530 will result in more findings of reasonable potential for old data that had previously been "okay". Again, there is need for good public relations and education. There may be a need for compliance schedules and caution to avoid laying blame for new limits. Concurrently, some were concerned that the proposed changes would result in too little testing being done. The use of background concentrations will be of some help by making the calculations more reflective of actual conditions. The lower number of tests done will increase the reasonable potential factor in the calculations.
8. There was considerable discussion on the last paragraph of section C.3. That would allow the DEP to not impose license limits in some cases where the discharger could show the cause of a past problem had been identified and fixed. Knowing there is great interest in this topic, DEP is leaving the language in the rule to provide the Board an opportunity to consider such an approach. It was pointed out that the DEP should carefully highlight the various positions and issues in this area. Some recommended that DEP consider language changes to clarify what is meant by "satisfactorily demonstrate" and provide examples. The rule should address when a limit will be imposed. There needs to be public notice and public participation when effluent limits are being considered. DEP noted that limits, or the reasons for not having them, are discussed in the fact sheets accompanying draft license renewals or modifications and are subject to public comment prior to issuance.
9. Some are opposed to the use of concentration limits, as described in section C.6.
10. Some are opposed to section D.4, with concerns over hardness and inconsistencies with where various parameters are measured. All measurements should be made directly above the point of each discharge.
11. The group discussed the revised wasteload model and associated water quality reserve in sections D 5 and 6. With regard to the reserve, it was noted that other several other states use a growth reserve of 10%. DEP noted that the proposed 15% reserve includes a non-point source allowance as well. Others said that increasing the non-point amount would put an unfair burden on point sources by giving them less allowance. Non-point sources should be asked to cut back. It was also noted that the growth allowance does not make much sense in certain areas where there is little or no development and existing sources need all of the available assimilative capacity just to accommodate current needs. DEP mentioned that if there is a non-attainment situation, a TMDL would be needed, and both point and non-point contributions would have to be included. The multiplier in D.6.e was discussed. The purpose of this factor is, in part, to compensate for the method used to calculate allocations. The past loading is based on facility averages, and these have a variation and uncertainty that

must be considered. Some thought the factor should be larger to avoid reasonable potential determinations that would cause more unnecessary testing. Finally, in D.6.g, the use of a single background concentration for multiple dischargers was a concern for some people. Changes in non-point contributions and changing geology affect the in-stream concentrations of background pollutants and hardness. DEP noted that as the rule is drafted, watersheds can be broken into manageable segments.

Discussion of Chapter 584

12. DEP is in the process of reevaluating the water quality criteria for human health protection. The values presented in the current draft of Chapter 584 are based on guidance published by EPA in April 1999, and assume fish consumption of 6.5 g/day. In fall 2000, EPA published alternate consumption recommendations, but did not change its published numeric guidance. EPA recommends that states use information in the following order when establishing fish consumption rates for water quality criteria, (1) use of local data; (2) use of data reflecting similar geography/population groups; (3) use of data from national surveys; and (4) use of EPA's default intake rates. Using this hierarchy, DEP is proposing that Maine statewide water quality criteria be used on a consumption rate of 32.4 g/day, the amount the Department of Human Services uses when setting fish consumption advisories. This rate is based on Maine data and experience. It was noted that all studies have biases and their results must be considered carefully as they are used.

DEP explained how human health criteria are calculated using formulas and assumptions provided by EPA. The fish consumption rates are just one factor going into the final criteria. For many compounds, differences in consumption rates will not make major changes. The primary factor influencing the criteria is the bioaccumulation (BAF) or bioconcentration (BCF) factor for a compound in the food chain. Where this is high, the fish consumption rate will be more important in setting the final criteria. The BAF is a better measure, but EPA has not published many of these, so DEP will use BCF's for the most part. All metals have low BCF's, as do many organic compounds. There was some discussion and concern with lead and cadmium; there are no BAF's for these metals and there are being found at high levels in shellfish. EPA is in the process of developing one for cadmium.

13. There was a discussion of sustenance uses by the tribes and other populations. These uses would require a different consumption rate than the statewide value. Tribal representatives noted that EPA has recommended a national default subsistence consumption rate of 142.4 g/day. Past studies may have been biased against eating fish from rivers perceived to be polluted. DEP noted that it has not developed a recommendation on whether default consumption rates should be used or if local studies or other specific information should be used. The rules should consider a process for all populations and uses. It was noted that uses go beyond consumption of fish. Also, commercial fishermen and certain economic groups may eat more than normal amounts. Other ways to help control toxics is through better education for private citizens on the effects of what goes down the drain, and finding ways to redirect manufacturing processes.

14. All members of the group should review the current draft of chapter 584 in light of the discussion and forward their comment to DEP. Issues for consideration include the process for determining site-specific criteria, defining sites and different populations, and ways to establish alternate consumption rates. (DEP noted that dioxin and mercury are specifically addressed in law and thus are outside the rule.)
15. Next steps. DEP will redistribute the draft of chapter 584 and supporting materials from EPA on calculation of human health criteria. Once DEP receives comments on chapter 584, it will prepare a redraft of the rule and redistribute it to the group. Depending on the comments and subsequent discussion, another meeting of the group may be scheduled to go over the revised rule.